

S1 S2

Biomek Set-up

Figure 1

Genewriter - Oligonucleotide Pooling Plan

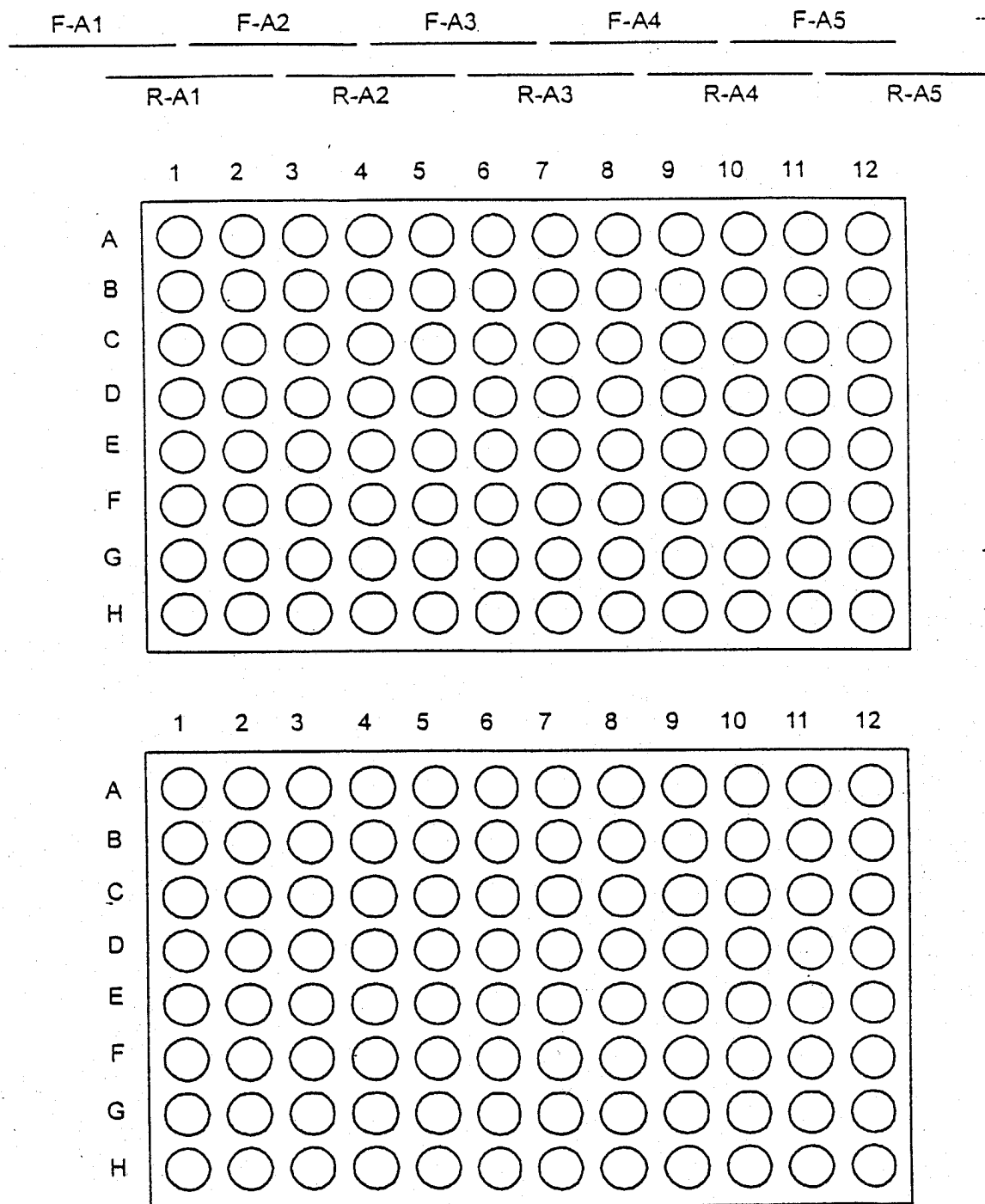


Figure 2

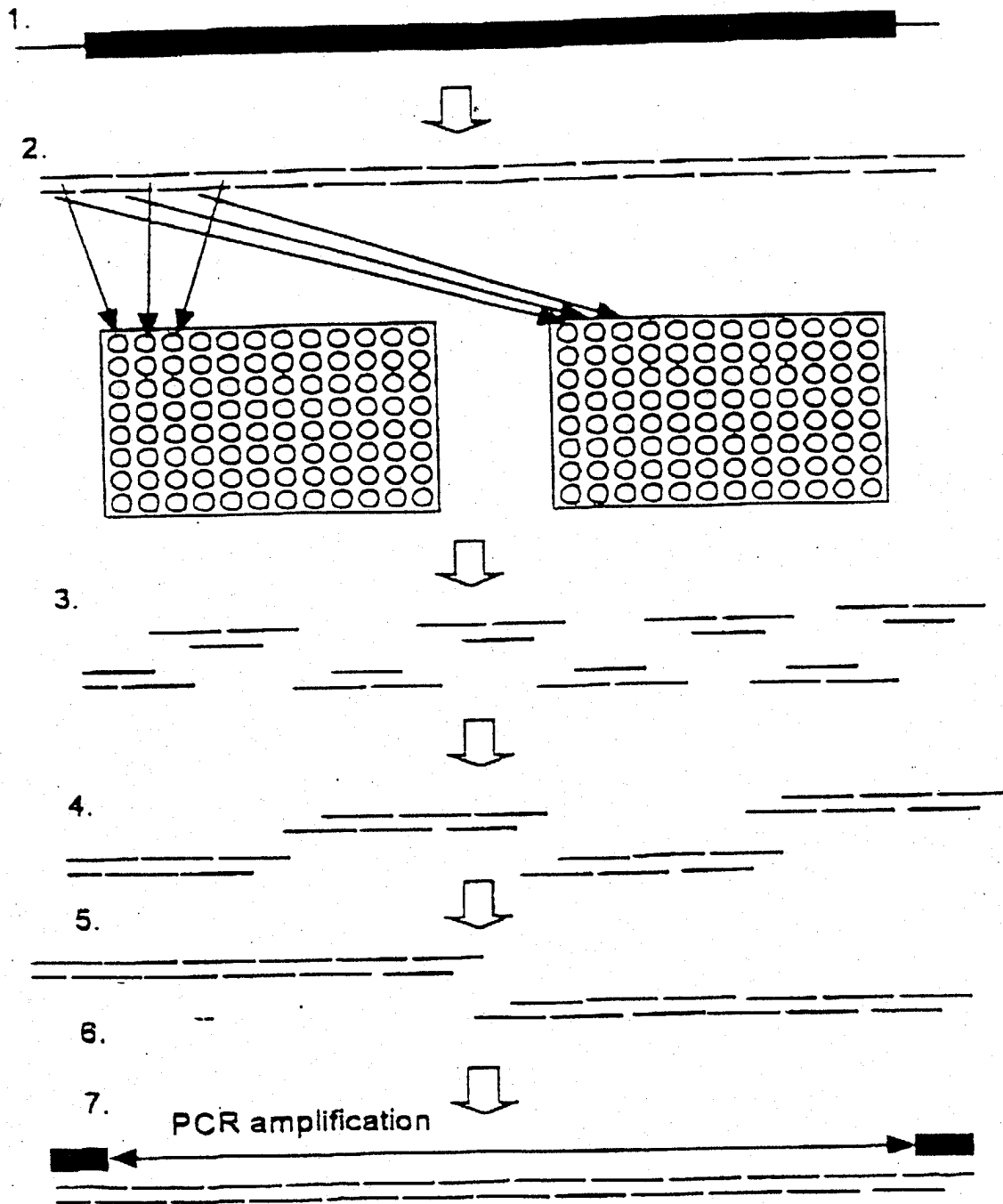


Figure 3

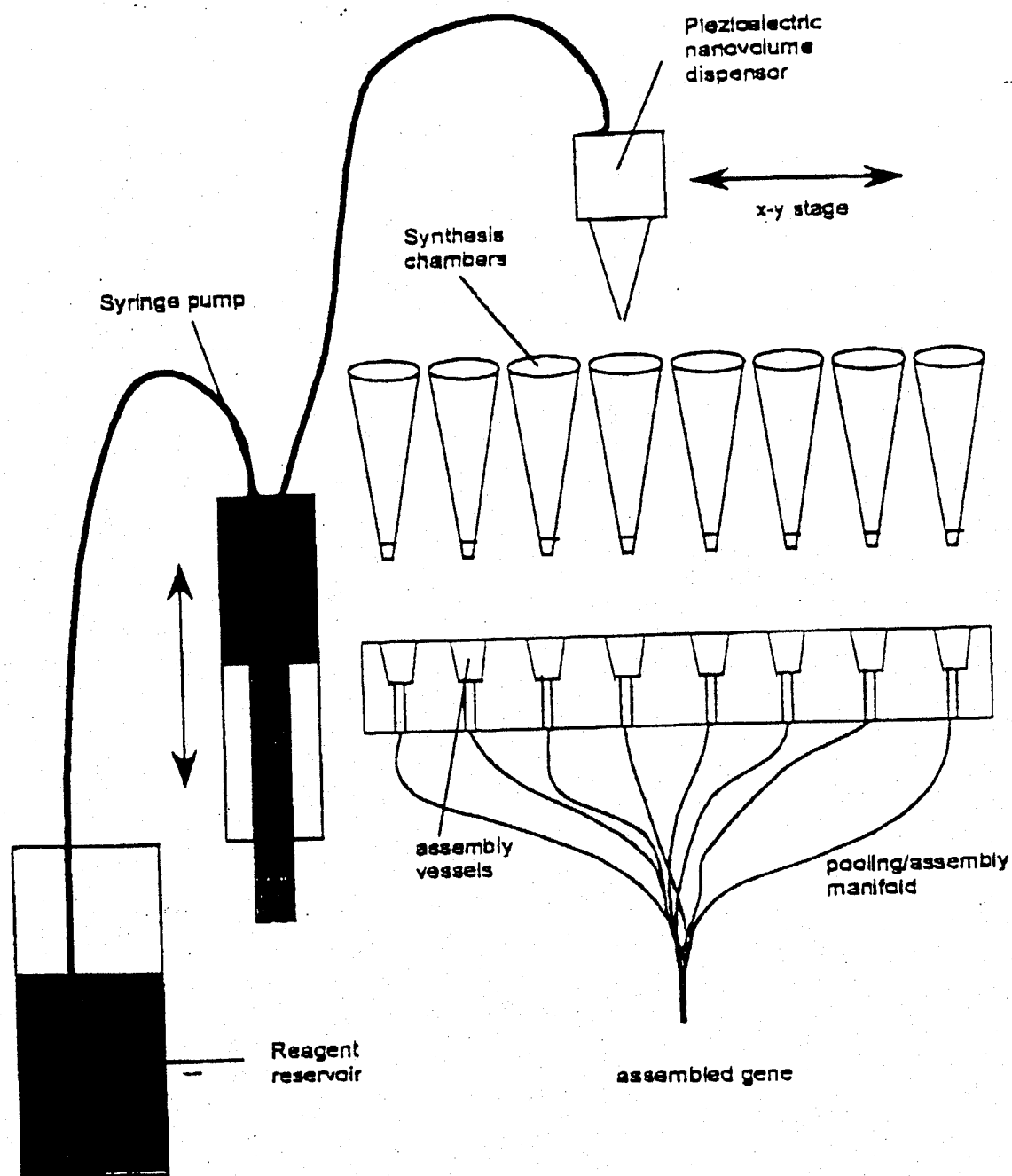


Figure 4

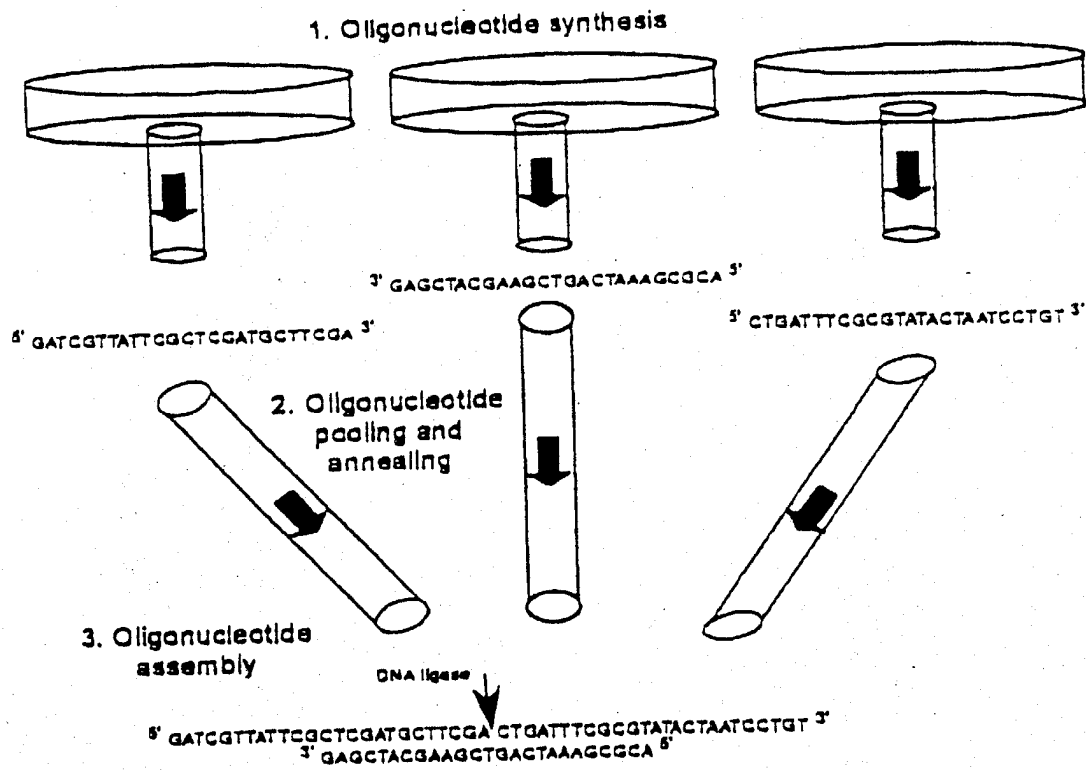


Figure 5

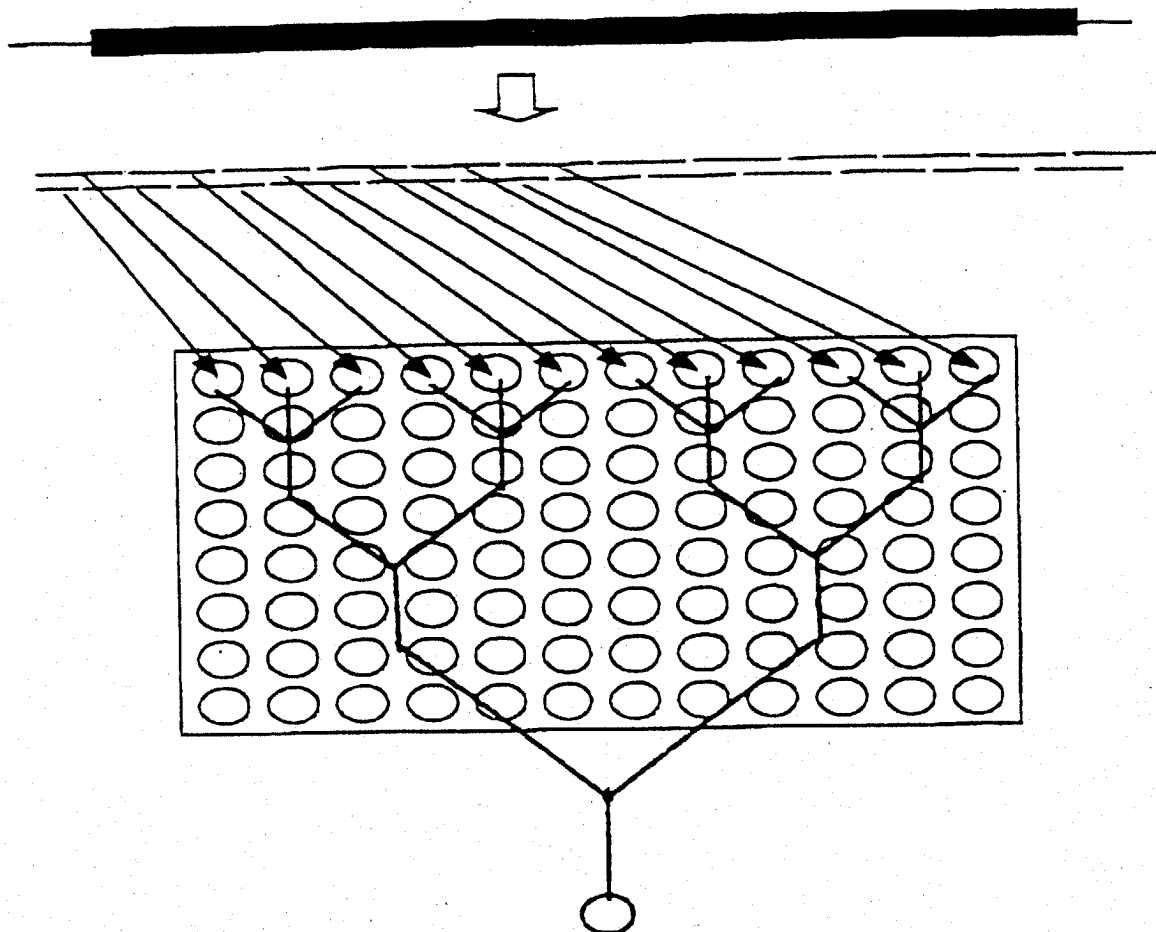


Figure 6

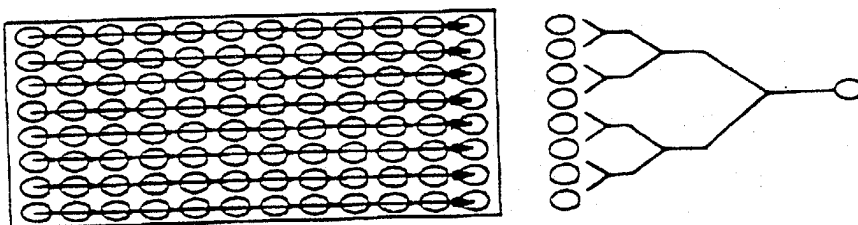


Figure 7

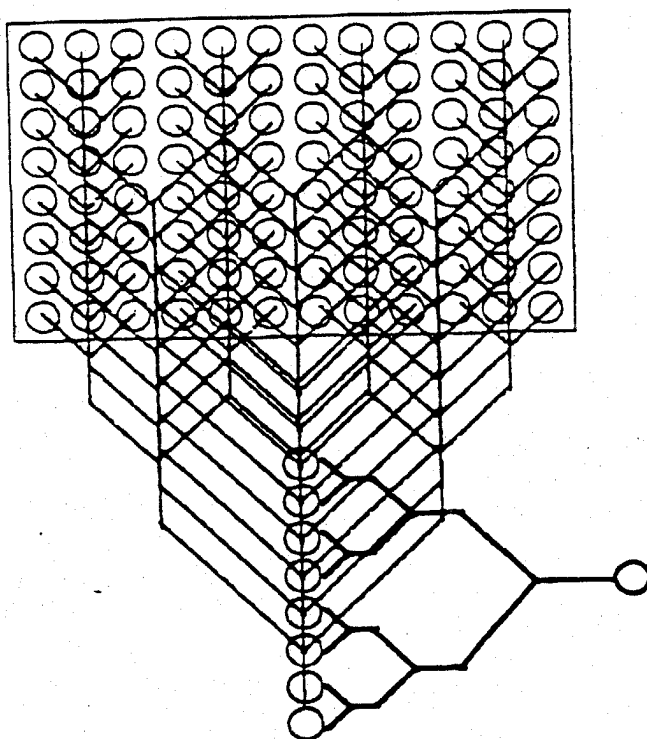


Figure 8

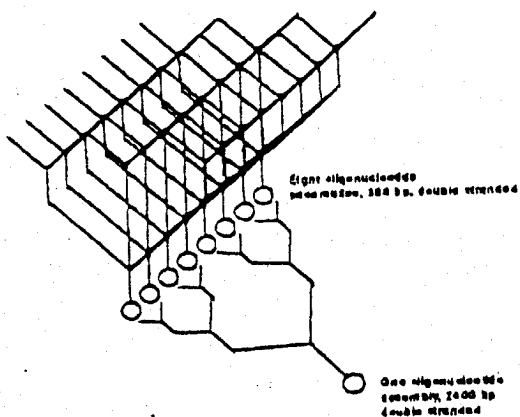
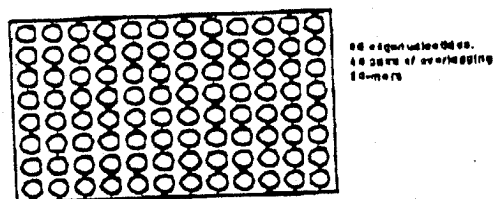


Figure 9

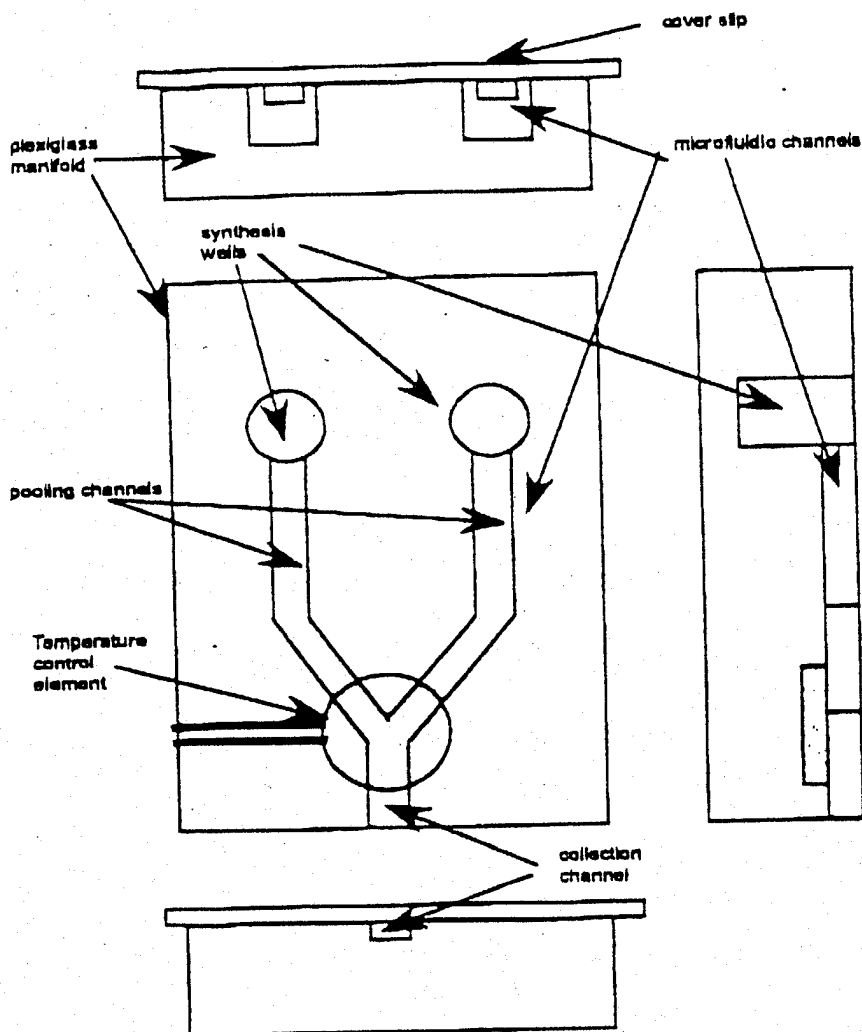


Figure 10

Genewriter Platform Design
8 x 96 well plates addressed with 16 piezoelectric
nanovolume dispensing heads; One wash/dry station
and one additional plate station. 8 plate evacuated by
a single vacuum station.

Capacity of 8 x 96 = 768 oligos/run

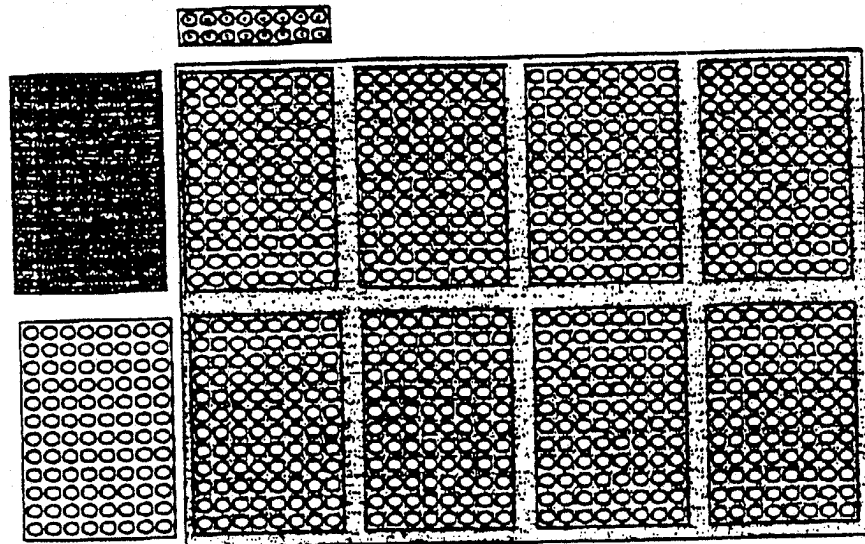


Figure 11

Genewriter Platform Design - High Capacity Mode
8 x 1536 well microassay plates addressed with 16 piezoelectric
nanovolume dispense heads; One wash/dry station
and one additional plate station. 18 plates evacuated by
a single vacuum station.

Capacity of 8 x 1536 = 12,288 oligos/run

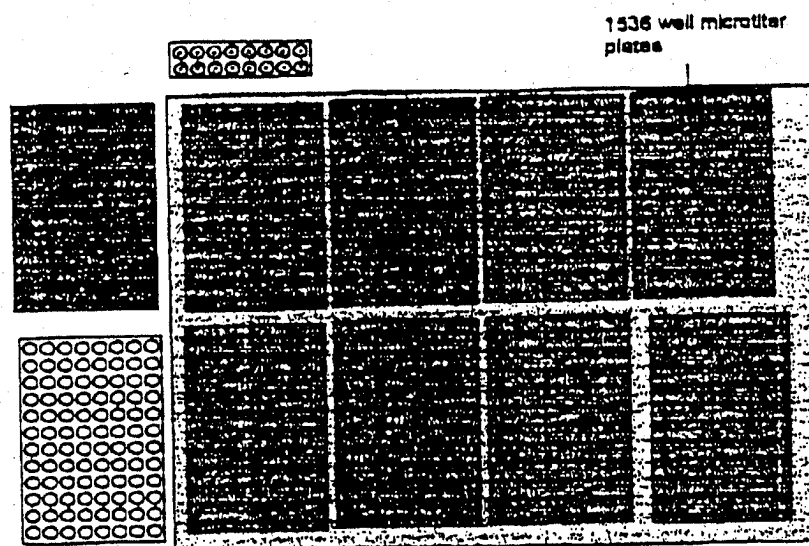


Figure 12

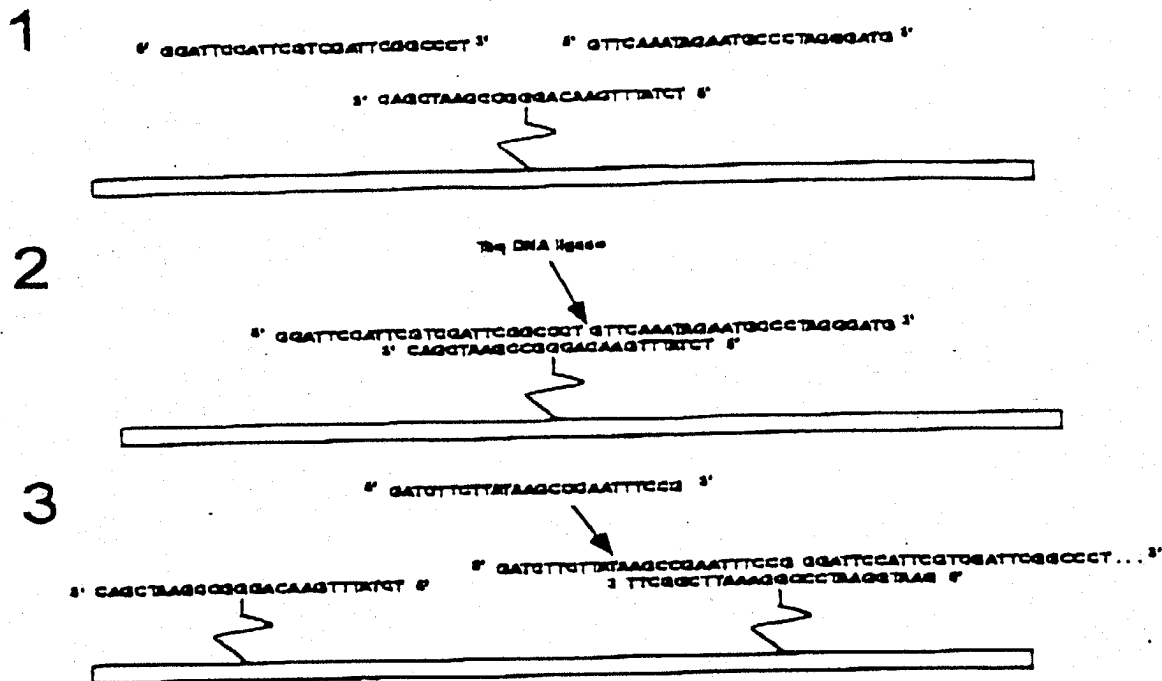


Figure 13

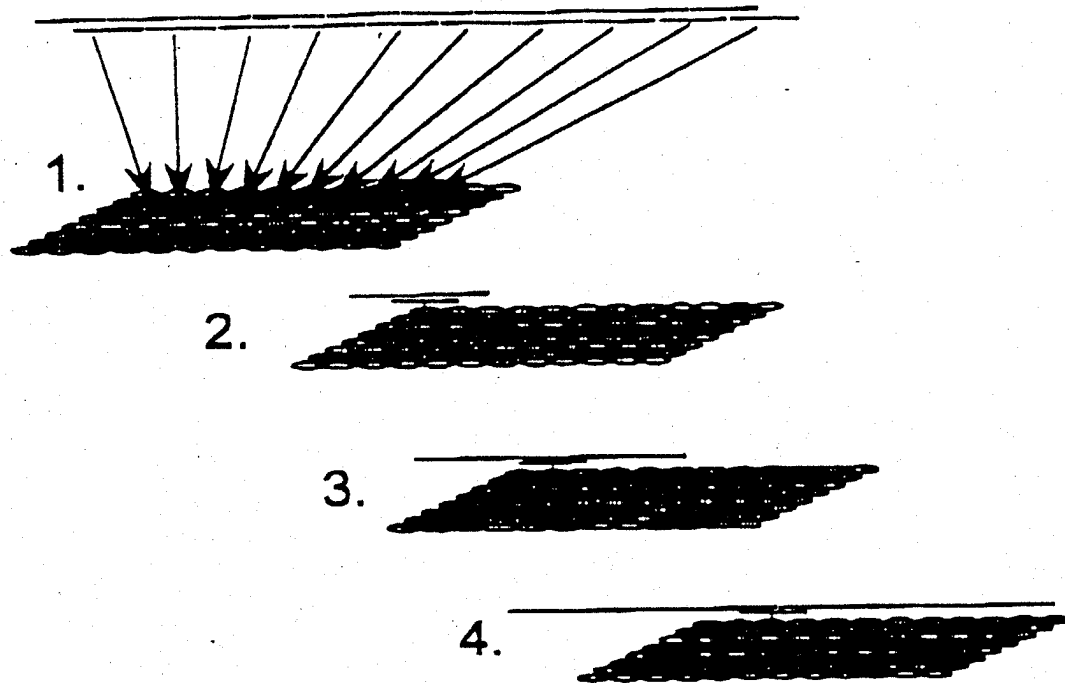


Figure 14

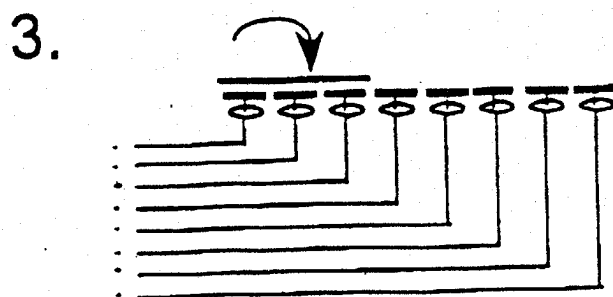
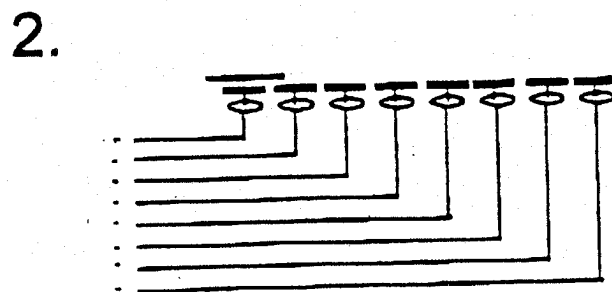
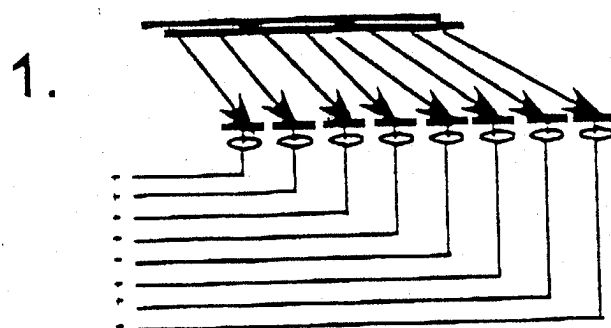


Figure 15

Bidirectional primer extension strategy for gene assembly

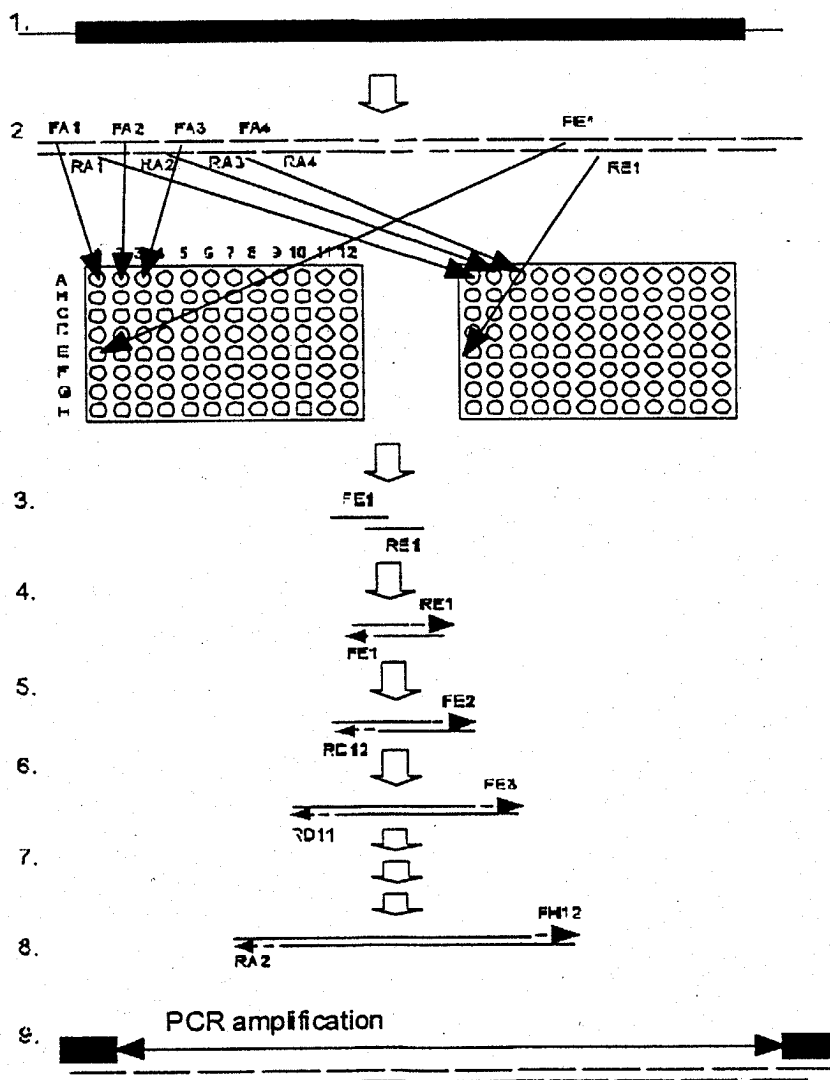


Figure 16

System Diagram for Genewriter

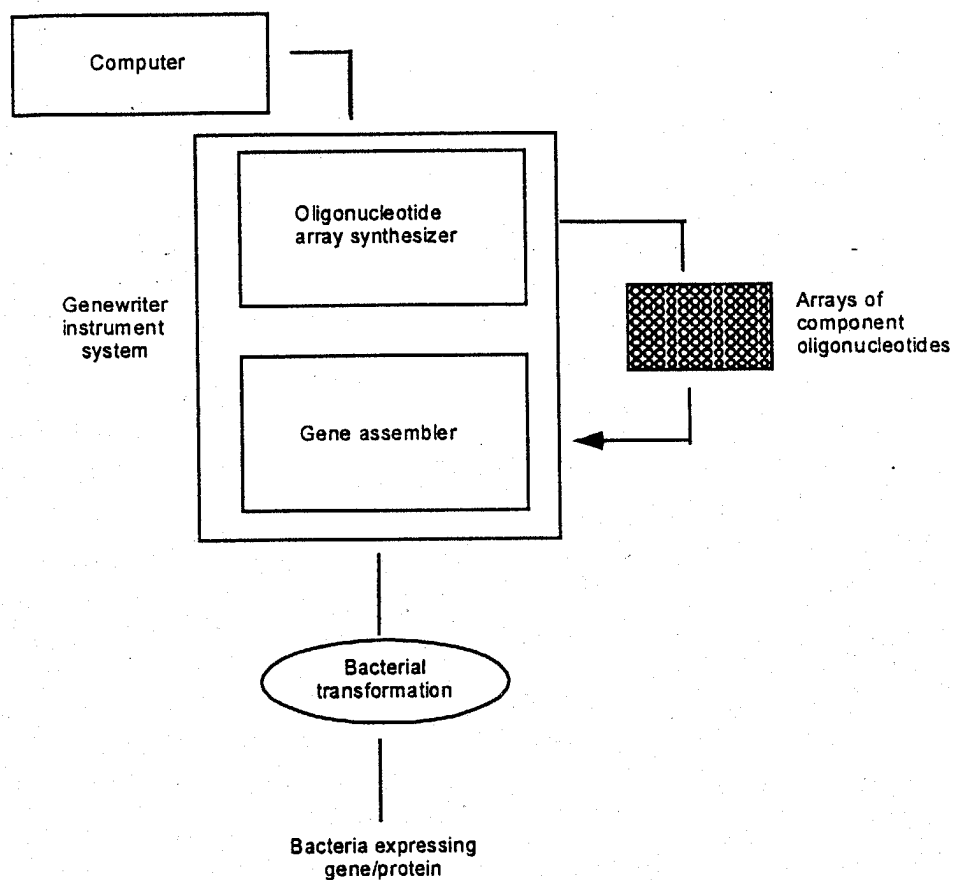


Figure 17

Perspective view of Genewriter Instrument

Genewriter diagram

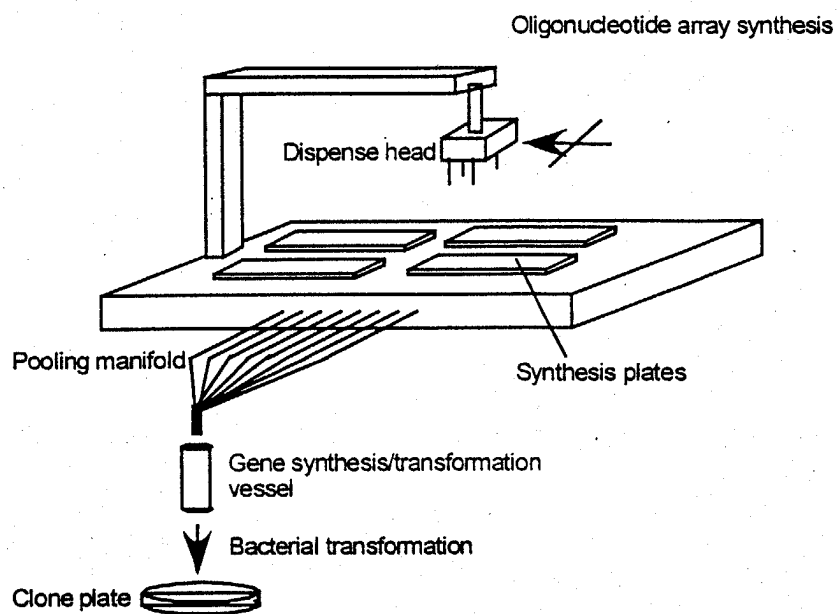


Figure 18

Generation of self-assembling oligonucleotide arrays

Option 1

Inventor: Glen A. Evans
Atty Docket No.: P-EA 4854

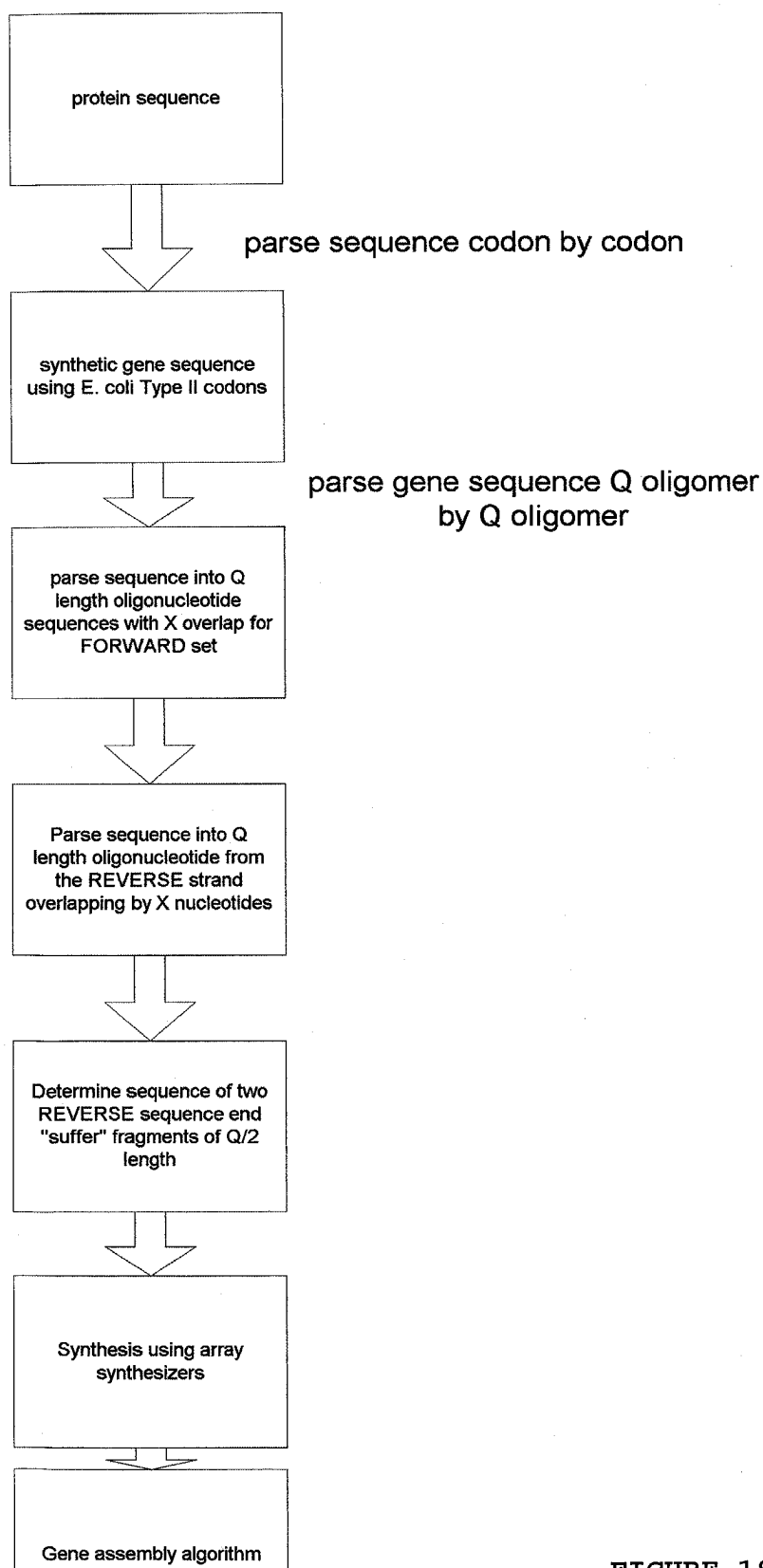


FIGURE 19

Assembly of Self assembling oligonucleotide arrays Option 1

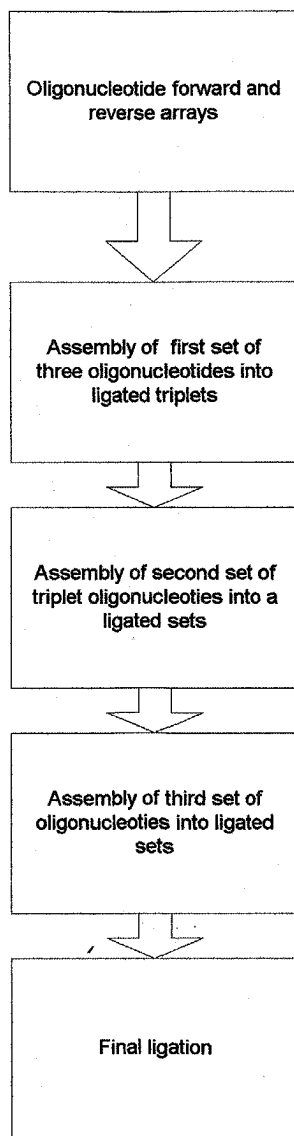


FIGURE 19

Generation of self-assembling oligonucleotide arrays

Inventor: Glen A. Evans
Atty Docket No.: P-EA 4854

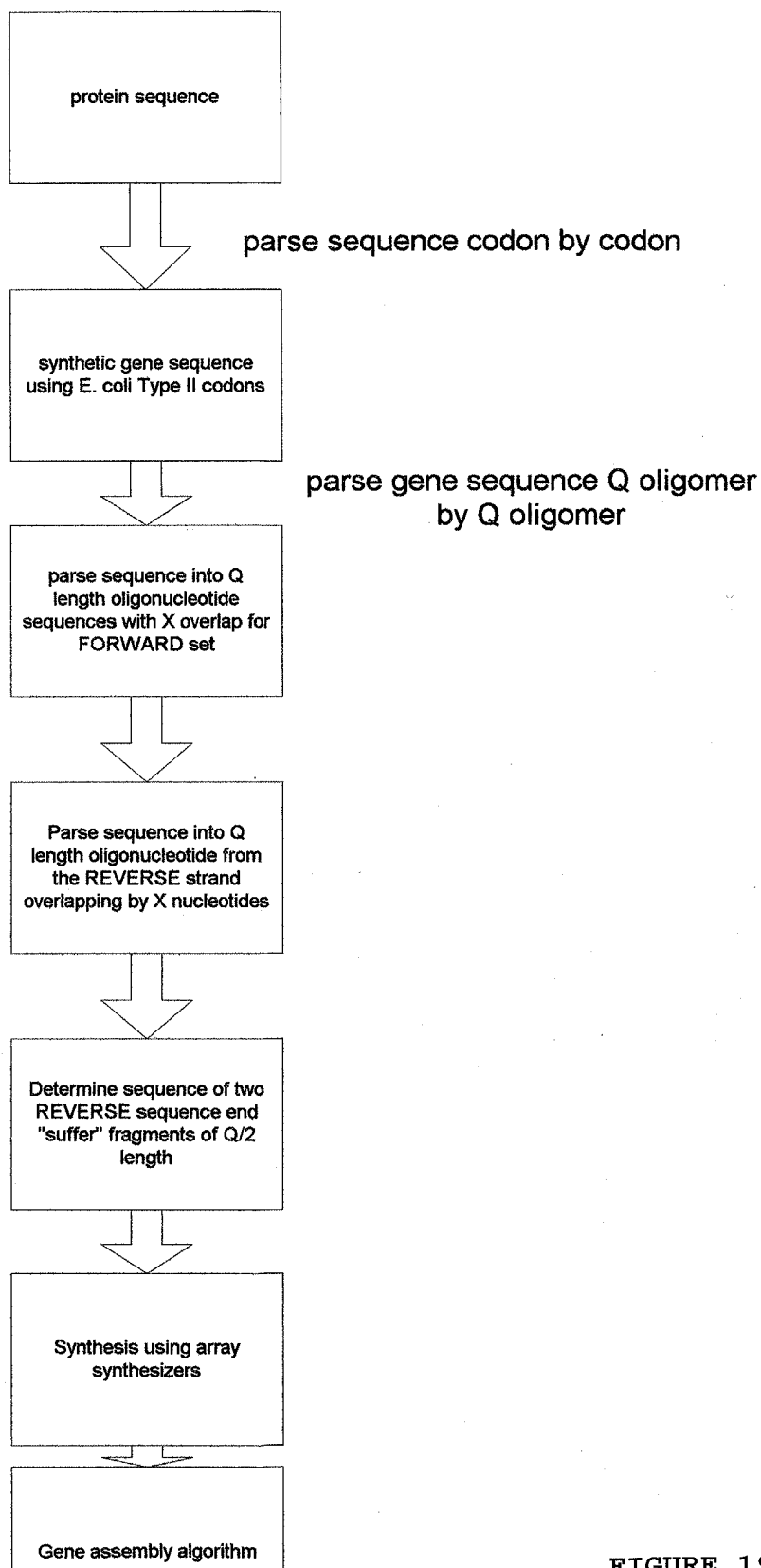


FIGURE 19